#### Work Order ID 66234



Page 1

February 8, 2011 8:43:28 AM Item ID: D3514-043 Accept Setup Start **Revision ID:** Stop Top Mounted Gimbal Assembly Item Name: **Start Date:** 2/08/11 Start Qty: 3.00 **Cust Item ID:** Required Date: 2/22/11 Reg'd Oty: 3.00 **Customer:** Reference: Start Run CL Date: 1102 08 Tooling: Process Plan: Date: Approvals: Stop Date: \_\_\_\_\_ SPC (Y/N): Date: Sequence ID/ Operation Set Up/ Reject Tool ID Tool # Plan Accept Reject Insp. **Work Center ID** Description Qty Number **Run Hours** Code Qty Stamp Draw Nbr **Revision Nbr** D3514 Rev A 100 0.00 Small Fab Small Fab 0.00 Memo Small Fab Assemble as per dwg D3514 110 QC5- Inspect part completeness to step on W/O 0.00 on Sulatio Memo Quality Control

120

Packaging

Packaging

Identify as per dwg & Stock Location:

PAP65811

0.00

0.00

W/O:			W	ORK ORDER CHANGE	S				· · · · · · · · · · · · · · · · · · ·
DATE	STEP	PRO	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
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									!
Part No	:	PAR #:	Fault Cate	egory:	NCR: Yes	No DQ	A:	Date:	
		esolution:							
NCR:		1	WORK ORD	ER NON-CONFORMA	NCE (NC	7)			
DATE	0===	Description of NC			n B	Verifi	cation	Approval	Approval
DAIE	STEP	Section A	Initial Chief Eng	Action Description  Chief Eng	Sign Date		ion C	Chief Eng	QC Inspector
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#### Work Order ID 66234

February 8, 2011 8:43:28 AM



Page 2

Item ID:

D3514-043

Accept

Setup Start

Stop

**Revision ID:** 

Item Name:

Top Mounted Gimbal Assembly

**Start Date:** 

2/08/11

QC:\_

Start Qty: 3.00

Operation

Description

Req'd Qty: 3.00

**Cust Item ID: Customer:** 

Tool ID

Reference:

Required Date: 2/22/11

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Process Plan:

Date:

**Tooling:** 

Date:

Start

Run



Date: \_\_\_

SPC (Y/N):

Set Up/

Date:

Stop



Sequence ID/ Work Center ID

130

Memo

QC21- Final Inspection - Work Order Release

0.00

0.00

**Run Hours** 

Accept Tool # Plan Qty Code

Reject Qty

Reject Insp. Number.

Stamp

Quality Control

W/O:	•		WC	ORK ORDER CHANG	ES				
DATE	STEP	PROCEDURE CHANGE				Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	•	PAR #:	Fault Cate	gory:	_ NCR: Yes	No DO	QA:	Date: _	
	R	esolution:	Dispositio	n:	QA: N/C	Closed: _		Date: _	
NCR:	-		WORK ORD	ER NON-CONFORM	ANCE (NC	R)			
DATE	STEP	Description of NC			tion B		ication	Approval	Approval
DALE	SIEF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign Dat		ction C	Chief Eng	QC Inspector
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# **Picklist Print**

February 8, 2011 8:43:28 AM

Work Order ID: 66234

Parent Item:

D3514-043

Parent Item Name: Top Mounted Gimbal Assembly



**Start Date: 2/08/11** 

Required Date: 2/22/11

Start Qty: 3.00

Required Qty: 3.00

Comments:	IPP Rev:A New Is	ssue 07-09-24	EC ve	erified by DD									
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN3-6A		Purchased	No			100	Each	253.0000		3	Su/2	2/10	
2011				Location	!	Loc	<u>Otv</u>	Loc Code					
				ST351			253		_	_a_	_		
					114941		103		_	Å			
					116191 116704		50 100		_	<u> </u>	_		
AN960JD10L	NAS1149D0332J	Purchased	No			100 111644	Each //	0.0000	2	6	1/00	2/10	
D3514-047 Top Mounted Housing As	ssembly	Manufactured	No			100	Each	3.0000		/3 JS	/ // /0=	; 2 <i>[co</i>	<u>,                                      </u>
	,			Location	<u>1</u>	Loc	<u>Oty</u>	Loc Code		//			
				ST233			3		_		_		
The same of the sa					53021		3			3	<b></b>		
D3522-1 / Gasket		Manufactured	No			100	Each	7.0000	1	3	511/0	2/10	)
				Location	<u>l</u>	Loc	<u>Qty</u>	Loc Code					
				ST067			7				-		
					35370		7		-	<b>#</b>	_		

Page 1

W/O:			W	ORK ORDER CHANG	ES				
DATE	STEP	PRC	OCEDURE CHANGE			Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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								÷.	
Part No		PAR #:	Fault Ca	tegory:	_ NCR: Yes	No <b>DQ</b>	A:	Date:	
			Disposition:			closed:		Date: _	
NCR:		\	WORK OR	DER NON-CONFORM	ANCE (NC	R)			
DATE	STEP	Description of NC	Initial	Corrective Action Section Description	tion B		cation		Approval
	0.2.	Section A	Chief Eng	Chief Eng	Date		ion C	Chief Eng	QC Inspector
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ĺ	1								
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### **Picklist Print**

Page 2

February 8, 2011 8:43:28 AM

Work Order ID: 66234 Parent Item: D3514-043 Parent Item Name: Top Mounted Gimbal Assembly Required Date: 2/22/11 **Start Date: 2/08/11** Required Qty: 3.00 Start Qty: 3.00 Manufactured No 100 Each 20.0000 Leg Location Loc Qty Loc Code ST068 20 3 54573 56100 17 100 Each 4.0000 Manufactured No Lower Plate Location Loc Qty Loc Code FP068 52380 D3531-041 Manufactured No 100 Each 2.0000 Bracket Assembly **Location** Loc Qty Loc Code ST181 2 2 64114 D3533-3 100 Each 164.0000 Manufactured No Set Screw Loc Code Location Loc Qty ST069 164 34899 78 35024 86

W/O:			WO	RK ORDER CHANG	ES				
DATE	STEP	PRO	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
							•		
				·					
Part No	•	PAR #:	Fault Categ	jory:	_ NCR: Yes I	No DQA	:	Date: _	·
	R	esolution:	Disposition	]:	_ QA: N/C Clo	sed:		Date: _	
NCR:	-		WORK ORDE	R NON-CONFORMA	ANCE (NCR	)			
DATE	OTED	Description of NC		Corrective Action Secti		Verifica	ation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section		Chief Eng	QC Inspector
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### **Picklist Print**

February 8, 2011 8:43:28 AM

Page 3

Work Order ID: 66234

Parent Item:

D3514-043

Parent Item Name: Top Mounted Gimbal Assembly



**Start Date: 2/08/11** 

Required Date: 2/22/11

Start Qty: 3.00

Required Qty: 3.00

MS24693-S29

Screw

Purchased

100

Each 185.0000

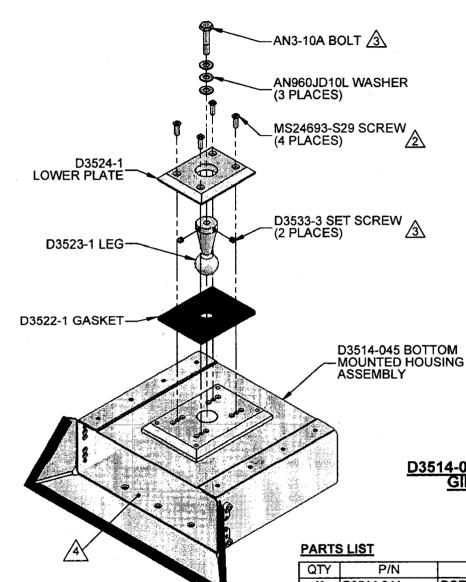
No

Location Loc Qty ST288 185 10 102147 103915 175 Loc Code

W/O:			WC	ORK ORDER CHANG	ES					
DATE	STEP	PRO	CEDURE CHA	NGE	Ву	D	ate	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	:	PAR #:	Fault Cate	gory:	_ NCR: Ye	es No	DQA	:	Date: _	
	R	esolution:	Dispositio	n:	_ QA: N/C	Close	ed:		Date:	
NCR:		\	WORK ORD	ER NON-CONFORM	ANCE (N	CR)				
DATE	CTED	Description of NC			tion B		Verifica	ition	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng		ın & ate	Section		Chief Eng	QC Inspector
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	DATE				CALE				
	07.06.18			GPS RECEIVER HOUSING	1:3				
	REV		DATE	DESCRIPTION					
1	Α		07.06.18	NEW ISSUE					



1) ASSEMBLE PER DART QSI 003 2) TORQUE SCREWS TO 5-6 in-lbs 3) TIGHTEN TO SNUG FIT ONLY

**INDICATED** 

4) IDENTIFY WITH DART P/N "D3514-041"
USING A WHITE MARKER ON THE INSIDE
OF THE HOUSING ASSEMBLY WHERE

RELEASED

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 6623

CX11102108

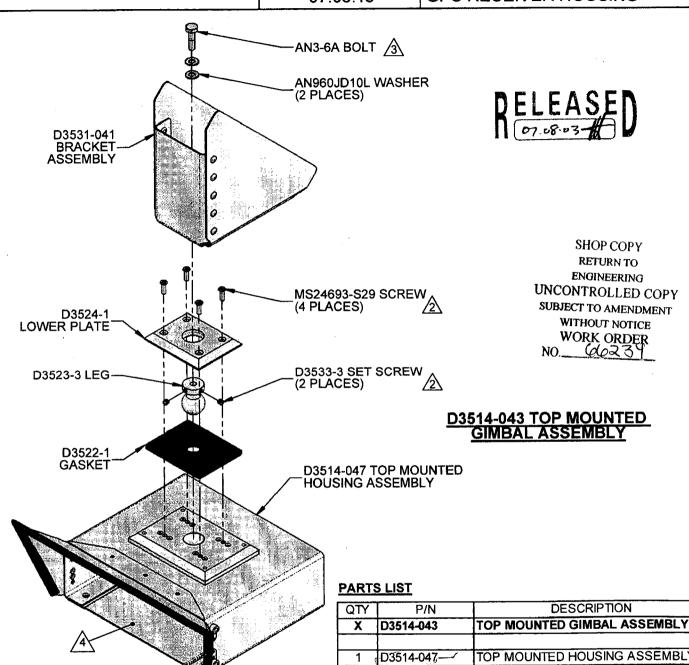
#### D3514-041 BOTTOM MOUNTED GIMBAL ASSEMBLY

QTY	P/N	DESCRIPTION
X	D3514-041	BOTTOM MOUNTED GIMBAL ASSEMBLY
1	D3514-045	BOTTOM MOUNTED HOUSING ASSEMBLY
1	D3522-1	GASKET
1	D3523-1	LEG
1	D3524-1	LOWER PLATE
2	D3533-3	SET SCREW
1	AN3-10A	BOLT
3	AN960JD10L	WASHER
4	MS24693-S29	SCREW

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DESIGN	DART AEROSPACE LT HAWKESBURY, ONTARIO, CANAD				
CHECKED	APPROYED	DRAWING NO.	REV. A		
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DATE		TITLE	SCALE		
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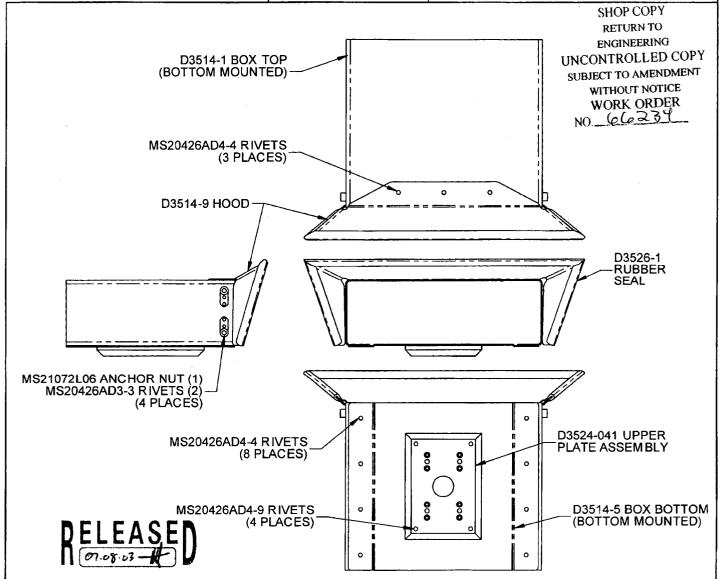
- NOTE:
  1) ASSEMBLE PER DART QSI 003
  2) TORQUE SCREWS TO 5-6 in-lbs
  3) TORQUE BOLTS TO 15-25 in-lbs
- 4) IDENTIFY WITH DART P/N "D3514-043" USING A WHITE MARKER ON THE INSIDE OF THE HOUSING ASSEMBLY WHERE **INDICATED**

QTY	P/N	DESCRIPTION						
Х	D3514-043	TOP MOUNTED GIMBAL ASSEMBLY						
1 ,	D3514-047	TOP MOUNTED HOUSING ASSEMBLY						
1 ,	لـر 1-D3522-1	GASKET						
1 (	D3523-3	LEG						
1	D3524=17 }	LOWER PLATE						
1	D3531-041 7	BRACKET ASSEMBLY						
2	D3533-3	SET SCREW						
1 ,	AN3-6A	BOLT						
2 ,	AN960JD10LT	WASHER						
4 5	MS24693-S29_	ŞCREW						

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LE		D3514	SHEET 3 OF 9				
DATE		TITLE	SCALE				
07.	06.18	GPS RECEIVER HOUSING	1:3				



# D3514-045 BOTTOM MOUNTED HOUSING ASSEMBLY

NOTES:
1) POWDER COAT ASSEMBLY BLACK
SANDTEX (4.3.5.7) PER DART QSI 005 4.3.
2) ASSEMBLE PER DART QSI 003

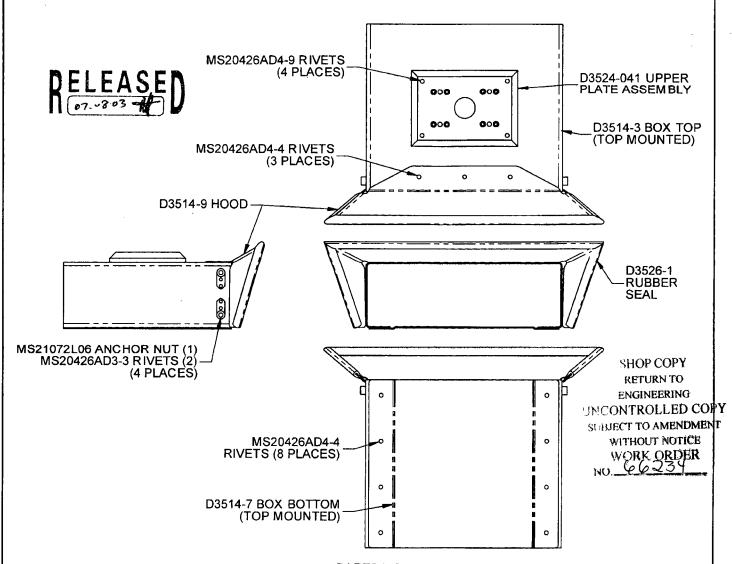
#### **PARTS LIST**

QTY	P/N	DESCRIPTION			
Х	D3514-045	BOTTOM MOUNTED HOUSING ASSEMBLY			
1	D3514-1	BOX TOP (BOTTOM MOUNTED)			
1	D3514-5	BOX BOTTOM (BOTTOM MOUNTED)			
1	D3514-9	HOOD			
1	D3524-041	UPPER PLATE ASSEMBLY			
1	D3526-1	RUBBER SEAL			
8	MS20426AD3-3	RIVET			
11	MS20426AD4-4	RIVET			
4	MS20426AD4-9	RIVET			
4	MS21072L06	ANCHOR NUT			

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07.06.18		GPS RECEIVER HOUSING	1:3



# D3514-047 TOP MOUNTED HOUSING ASSEMBLY

## **NOTES**

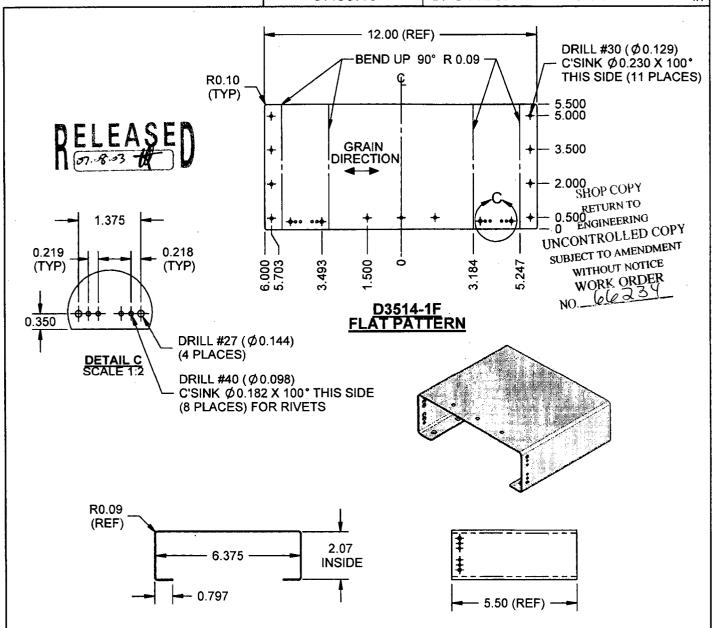
1) POWDER COAT ASSEMBLY BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3. 2) ASSEMBLE PER DART QSI 003 PARTS LIST

QTY	P/N	DESCRIPTION
Х	D3514-047	TOP MOUNTED HOUSING ASSEMBLY
_1	D3514-3	BOX TOP (TOP MOUNTED)
1	D3514-7	BOX BOTTOM (TOP MOUNTED)
1	D3514-9	HOOD
1	D3524-041	UPPER PLATE ASSEMBLY
1	D3526-1	RUBBER SEAL
8	MS20426AD3-3	RIVET
11	MS20426AD4-4	RIVET
4	MS20426AD4-9	RIVET
4	MS21072L06	ANCHOR NUT

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07.06.18		GPS RECEIVER HOUSING	1:4



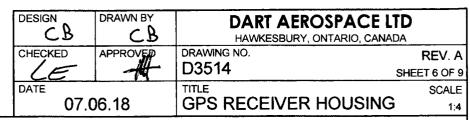
#### D3514-1 BOX TOP (BOTTOM MOUNTED)

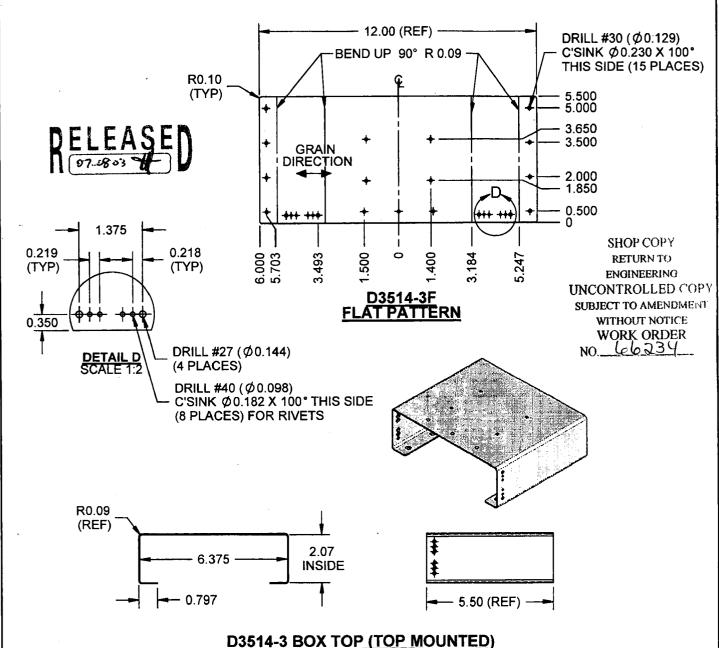
NOTES:
1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX 6) PART IS SYMMETRIC ABOUT €
- 7) C'SINKS ARE ON THE INSIDE OF PART (AFTER BENDING)

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1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR

- AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)

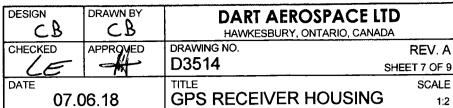
  2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

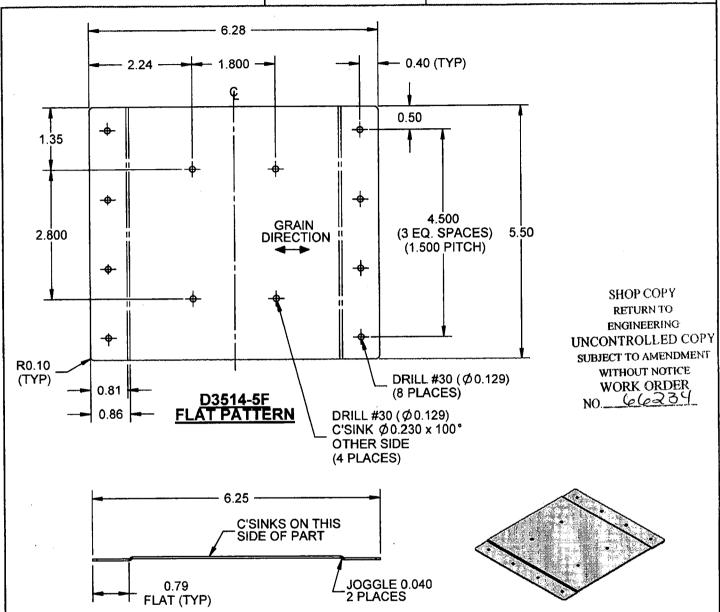
  3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED 5) BREAK ALL SHARP CORNERS TO 0.010 MAX

6) PART IS SYMMETRIC ABOUT ©
7) C'SINKS ARE ON THE INSIDE OF PART (AFTER BENDING)

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# D3514-5 BOX BOTTOM (BOTTOM MOUNTED)

1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

5) BREAK ALL SHARP CORNERS TO 0.010 MAX

6) PART IS SYMMETRIC ABOUT &

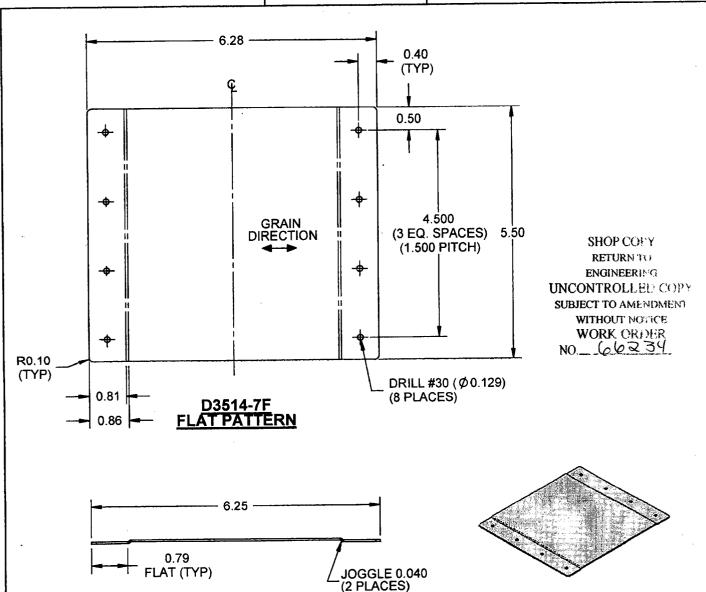
7) C'SINK ABOVE JOGGLE



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CHECKED	APPROVED	DRAWING NO.	REV. A SHEET 8 OF 9
DATE 07.0	06.18	GPS RECEIVER HOUSING	SCALE 1:2



# D3514-7 BOX BOTTOM (TOP MOUNTED)

**NOTES** 

1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES ARE CONVERSION COAT PER DART QSI 005 4.1

4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

5) BREAK ALL SHARP CORNERS TO 0.010 MAX

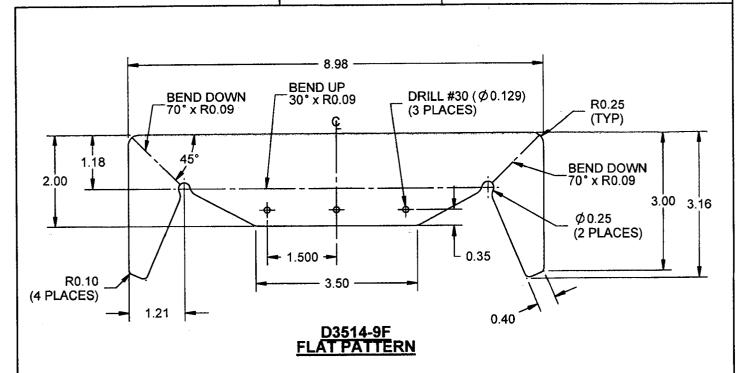
6) PART IS SYMMETRIC ABOUT &

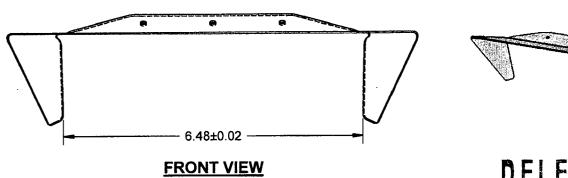


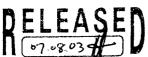
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#### D3514-9 HOOD

NOTES:
1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART IS SYMMETRIC ABOUT &

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